

**Installation, Operation and Maintenance Instructions**  
Controller Manual  
132 Over-Temperature Controller

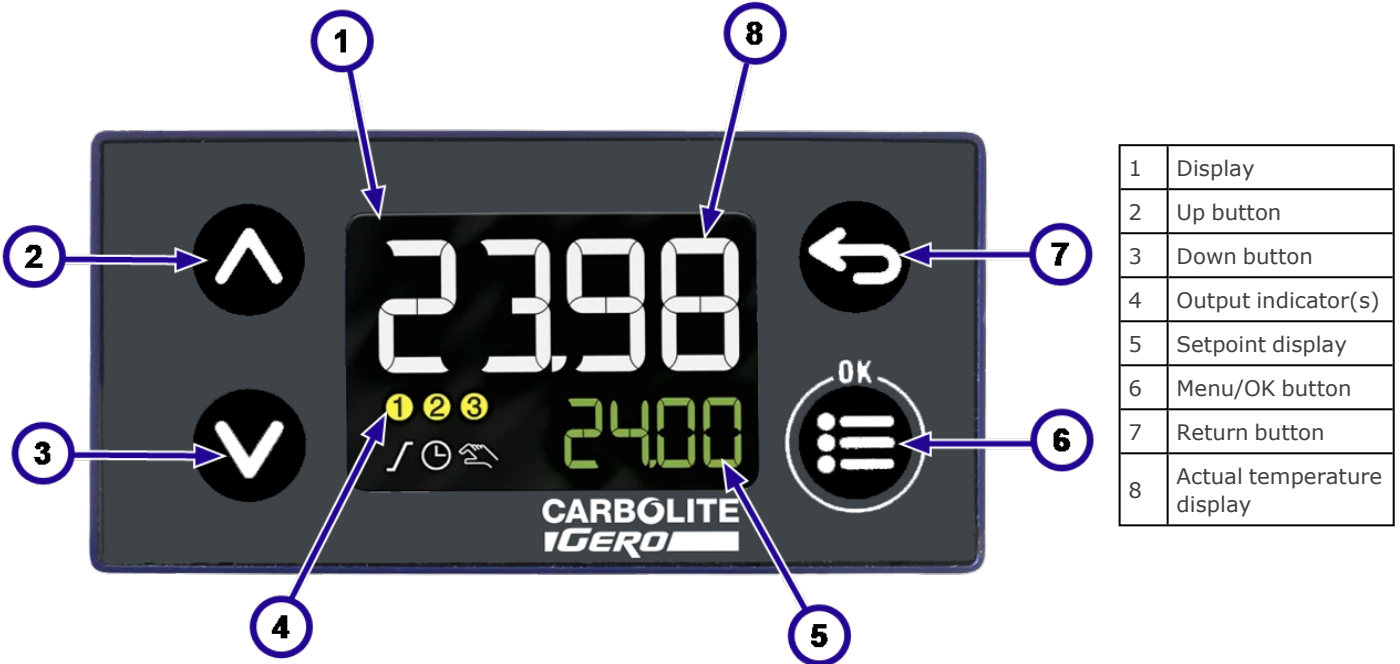
# 132 Over-Temperature Controller

## Contents

This manual is for guidance on the use of the Carbolite Gero product specified on the front cover. This manual should be read thoroughly before unpacking and using the furnace or oven. The model details and serial number are shown on the back of this manual. Use the product for the purpose for which it is intended.

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## 1.0 132 Over-Temperature Controller



### 1.1 Over-Temperature Protection

#### 1.1.1 Controls

Most Carbolite Gero products are fitted with an instrument switch which cuts off power to the controller and other parts of the control circuit.

To operate the controller, power must be supplied to the product and the instrument switch must be on. If a time switch is included in the product circuit, this must be in the 'ON' position.

When an over-temperature condition occurs, the controller cuts the power to a contactor, which in turn cuts power to the heating elements. Power is not restored until the controller is 'reset'.

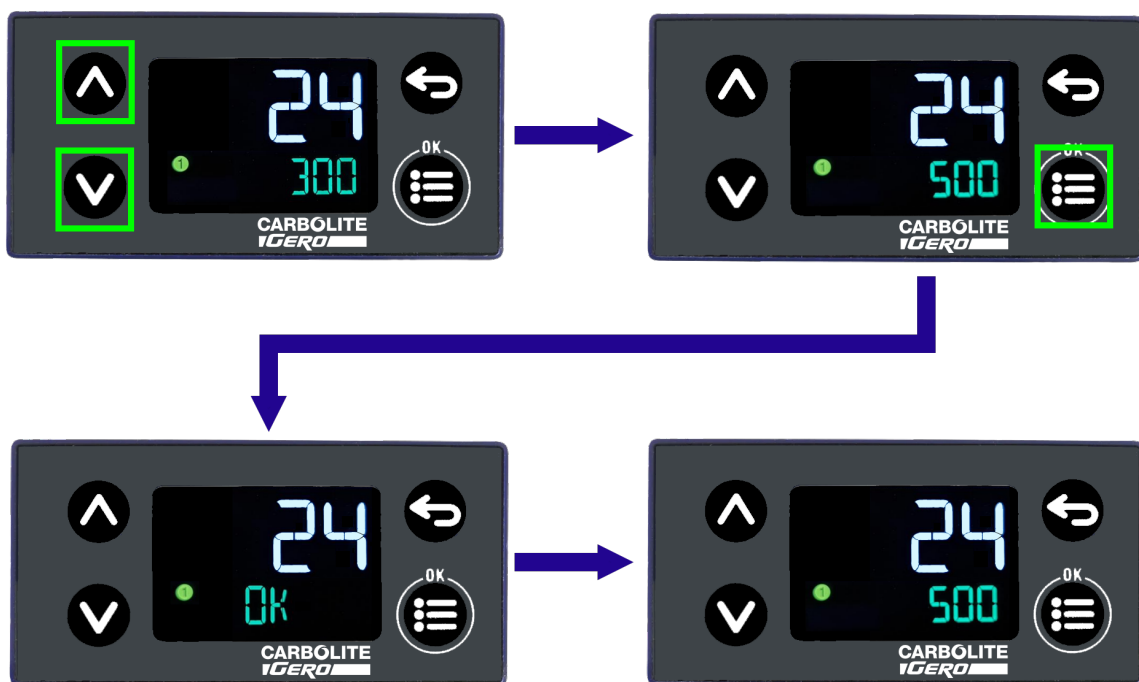
Some components will operate after the over-temperature feature isolates the heating circuit e.g. cooling fans will continue to operate, provided that there is a power supply to the product.

## 1.2 Operation

### To change the over-temperature alarm setpoint:

1. Use the up and down buttons to adjust the setpoint to the desired temperature.
2. Press the Menu/OK button to accept the new value. **OK** will appear briefly on the lower half of the display.

The example pictured shows an over-temperature alarm setpoint being adjusted from 300°C to 500°C.



**Note:** The over-temperature alarm is configured so that the alarm will trigger when the temperature increases above the over-temperature alarm setpoint.

For example, if the over-temperature alarm setpoint is set to 900°C, the alarm will trigger when the actual temperature goes **above** 900°C.

### 1.3 Over-Temperature Alarm

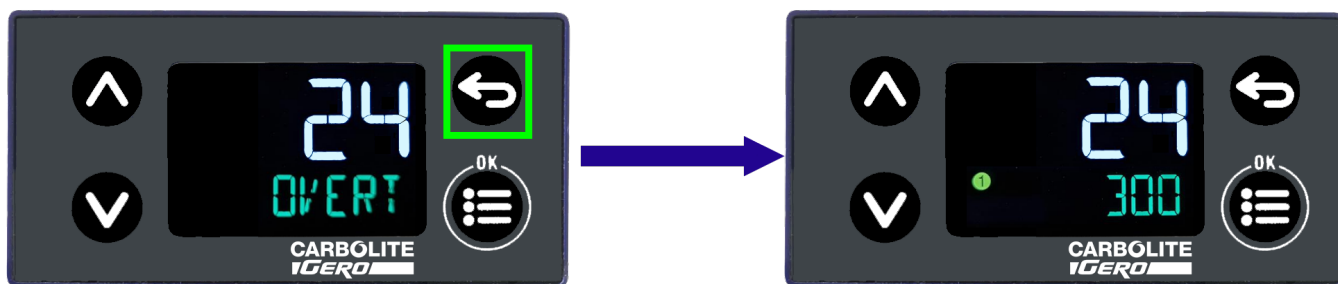
If the over-temperature alarm state is triggered:

The product will stop heating and *OVERTEMP* will be displayed on the scrolling text on the lower half of the display.



To acknowledge / reset the alarm:

Press and hold the return button.



**Note:** The over-temperature alarm cannot be acknowledged / reset until the actual temperature drops below the over-temperature setpoint.

### 1.4 Sensor Break

If the thermocouple breaks or becomes disconnected, then the controller will register a sensor break, and cut power to the heating elements.

The display will show *SBRK* and a scrolling *OVERTEMP* message.



## 1.5 Audible Alarm

If an audible alarm is supplied for use with the over-temperature controller, it is normally configured to sound when the over-temperature alarm is triggered, and to stop sounding when the alarm is acknowledged.

Note: The alarm may sound during controller start-up.



ProductLabel

The products covered in this manual are only a small part of the wide range of ovens, chamber furnaces and tube furnaces manufactured by Carbolite Gero for laboratory and industrial use. For further details of our standard or custom built products please contact us at the address below, or ask your nearest stockist.

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